Amendment to the Claims:

This listing of the claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

Claims 1-4 (Canceled).

Claim 5 (Currently amended). ~~An achromatic~~ A quarter-wave ~~film~~ plate device comprising:

(a) a first and a second uniaxial polymeric films; and

~~(a)~~ (b) a ~~laminated~~ twisted nematic-liquid crystal (TN-LC) polymeric film sandwiched between ~~two~~ the first and second uniaxial polymeric films to ~~provide an optical component;~~ form the quarter-wave plate device with a broadband spectrum.

~~(b) a polarizer to receive incident unpolarized light of a wide spectral bandwidth and convert said incident unpolarized light into linearly polarized light; and,~~

~~(c) a reflector of the circularly polarized light emergent from the optical component so that it passes back through the optical component.~~

Claims 6-8 (Canceled).

Claim 9 (New). The quarter-wave plate device of claim 5, further comprising:

(c) a linear polarizer laminated on an exterior surface of one of said first and second unaxial polymeric films, wherein said linear polarizer receives incident

unpolarized light of a wide spectral bandwidth and converts said incident unpolarized light into a linearly polarized light, wherein the linearly polarized light passes through said quarter-wave film and produces a circularly polarized light in a wide spectral bandwidth.

Claim 10 (New). The quarter-wave plate device of claim 9, wherein the TN-LC film includes:

a twist angle of TN-LC film of approximately 77.5 degrees, wherein the incident wave is linearly polarized at approximately $\beta = 18.8°$.

Claim 11 (New). The quarter-wave plate device of claim 10, wherein the first and second unaxial polymeric film includes:

an angle $\alpha 1$ approximately 91.2° and for one of the first and second unaxial polymeric film; and

an angle $\alpha 2$ of approximately minus 50.1 for the other one of the first and second unaxial polymeric film.

Claim 12 (New). The quarter-wave plate device of claim 9, wherein the TN-LC film includes:

one of a left handedness and a right handedness twist sense.

Claim 13 (New). The quarter-wave plate device of claim 9, wherein the TN-LC film includes:

a TN-LC film having a thickness of approximately 4.9 μm and a corresponding retardation of approximately 0.891λ , wherein $\lambda = 550$ nm.

Claim 14 (New). The quarter-wave plate device of claim 9, wherein the first and second unaxial polymeric films includes:

a first unaxial polymeric film thickness of approximately 3.3 μm and a corresponding retardation of approximately 0.198λ; and

a second unaxial polymeric film thickness of approximately 2.48 μm and a corresponding retardation of approximately 0.149λ.

Claim 15 (New). A broadband circular polarizer comprising:

a first and second uniaxial polymeric film;

a twisted nematic-liquid crystal (TN-LC) polymeric film sandwiched between said first and second uniaxial polymeric film; and

a linear polarizer laminated on an exterior surface of one of the first and the second uniaxial polymeric films to form said broadband circular polarizer.

Claim 16 (New). The broadband circular polarizer of claim 15, wherein the TN-LC film includes:

a twist angle of TN-LC film of approximately 77.5 degrees, wherein the incident wave is linearly polarized at approximately $\beta = 18.8°$.

Claim 17 (New). The broadband circular polarizer of claim 15, wherein the first and

second unaxial polymeric film includes:

an angle $\alpha 1$ approximately 91.2° and for one of the first and second unaxial polymeric film; and

an angle $\alpha 2$ of approximately minus 50.1 for the other one of the first and second unaxial polymeric film.

Claim 18 (New). The broadband circular polarizer of claim 15, wherein the TN-LC film includes:

one of a left handedness and a right handedness twist sense.

Claim 19 (New). The broadband circular polarizer of claim 15, wherein the first and second unaxial polymeric films includes:

a first unaxial polymeric film thickness of approximately 3.3 μm and a corresponding retardation of approximately 0.198λ; and

a second unaxial polymeric film thickness of approximately 2.48 μm and a corresponding retardation of approximately 0.149λ.